Telemedicine: Transcending Barriers to Rural HIV Care

Medical AIDS Outreach of Alabama, Inc.
Montgomery, AL
Overview of Alabama eHealth

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Alabama eHealth
HIV Burden in the Deep South

Map: AIDSVu.org

2011 Rate of adults/adolescents living with an HIV or AIDS diagnosis per 100,000 population

- 0 to 40
- 41 to 54
- 55 to 67
- 68 to 83
- 84 to 105
- 106 to 135
- 136 to 180
- 181 to 250
- 251 to 394
- 395+

Data not shown *
Data not released to AIDSVu **
At the end of 2013, 14,019 Alabama residents were known to be living with HIV and 6,362 (45%) of these had progressed to Stage 3 (AIDS) infection.

CDC estimates 1 in 7 (14%) HIV positive individuals are unaware of their infection. Applying this prevalence estimate suggests as many as 16,301 Alabama residents may be infected with HIV.
Barriers to HIV Care in Rural Alabama

A Synergy of Plagues *

- Poverty
- Race
- Stigma
- Domestic Violence
- Lack of transportation
- Poor Educational Systems
- Health Funding and Infrastructure Challenges
- High rates of uninsured patients
- High number of medically underserved areas

*Paul Farmer, "Women, Poverty and AIDS"
Poverty Rates in Alabama

- 67 counties total
- 46 counties have poverty rates higher than the National average
- 23 counties have more than 20% of the population living below the Federal Poverty line
62 of Alabama’s 67 counties are, either partially or whole, Health Professional Shortage Areas.

HIV treatment centers are located in urban areas, while new infections increase in rural counties.

Contains areas that are designated as HPSAs

Entire County is designated as a HPSA

Data from the ADPH 2014
Transportation Barrier

- Only 4 of Alabama’s 67 counties have any public transportation at all, and even those systems are very limited.

- Telemedicine transcends some geographic and scheduling barriers, but transportation is still a burden for many PLWH/A in rural areas.
“The stigma surrounding AIDS is a key reason that the South is the epicenter of new HIV infections in the United States. Half of all new infections in the United States are in the South..."
What is Telemedicine?

• Telemedicine is a video chat environment between a doctor and a patient

• High definition camera and video screen with 1080p capability

• Bluetooth peripheral equipment

• 100% secure: telemedicine uses 128+ bit encryption

• Transcends almost all of the barriers most PLWH/A face in accessing care
The Alabama eHealth Story
The Montgomery Experience

2009 Concept

2010 Consortium

2011 Funding

2012 Execution Evolution Expansion

MAO

Alabama eHealth
Telemedicine - Beginning

- The original AIDS United grant to 3 collaborating agencies allowed each to create a "hub" site and a "spoke" site
Expansion

4 models of telemedicine clinics at MAO
1. Our own brick and mortar clinics (2)
2. Collaboration with a primary care residency program for space (1) 2012
3. Collaboration with local FQHCs primary care clinics for space (3) 2014
4. Collaboration with ADPH for space, equipment, and internet in County Health Departments (6) 2015

• All telemedicine sites are housed in health care facilities
• Future: Collaboration with new partners, utilize their labs/nursing supports and expansion with current partners
Telemedicine - Today

• Linking the hubs and beyond....
  • MAO expansion with 10 telemedicine satellite clinics
  • 1 with UAB Family Practice Residency program
  • 3 with FQHC primary care clinics
  • 6 with County Health Department clinics
Telemedicine in Action

Expansion of Wrap-Around Services to our Telemedicine Clinics

- Case Management
- Pharmacy Adherence Counseling
- Mental Health Counseling
- Spanish Translation
- Insurance Navigator Visits
- Family Practice Residency teaching
- Use for internal meetings and trainings
### 2015 Telemedicine Visits

**through September 2015**

- Telemedicine Provider visits - 446
- Mental Health Counseling visits - 276
- Pharmacy Adherence Counseling – 19
- Social Work Case Management - 13

<table>
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<tr>
<th>Location</th>
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<tr>
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**Total Visits:** 446
Outcomes

• Every patient has the right to see the provider in person
• Most patients found the technology nondisruptive and not significantly different than traditional care
• Patients did not view telemedicine as negatively impacting patient-provider relationship
• Concerns about telemedicine care were minimal
• >90% reported being extremely satisfied
• >95% virologic suppression rate
• >94% retention rate
On-going Challenges

• Stigma and privacy in small communities

• Sustainability of funding

• Continued transportation needs for patients

• Lack of adequate broadband in some communities

• Insurance reimbursement

• Scheduling complexities
Future Plans

• Additional telemedicine sites
• Additional treatment services
  - Hepatitis C treatment
• Distance learning partnerships
• Training/preceptorships
• Community Outreach for increased HIV testing and linkage with telemedicine partners
Thank you to our funding partners, our collaborating agencies, the staff of MAO, and our patients!

**Funders:**
- AIDS United
- Alabama Department of Public Health
- CDC

**Collaborating Agencies:**
- UAB Family Practice Residency Program, Selma, AL
- Southeast Alabama Rural Health Associates (SARHA) and their Doctor's Center in Troy, AL and Clayton Family Health Center, Clayton, AL
- Health Services Inc., Hayneville Family Health Center, Hayneville, AL
- Alabama Department of Public Health- county health departments in Covington County, Conecuh County, Escambia County, Henry County, Marengo County and Perry County
Questions
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